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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/922,220	08/03/2001	Israel Rubinstein	0178.0049US1	8917

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EXAMINER	
ALEXANDER, LYLE	

ART UNIT	PAPER NUMBER
1797	

MAIL DATE	DELIVERY MODE
09/09/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/922,220	RUBINSTEIN ET AL.	
	Examiner	Art Unit	
	Lyle A. Alexander	1797	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *29 June 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *331-376* is/are pending in the application.

4a) Of the above claim(s) *350-359* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *331-349 and 360-376* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *6/10/09*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Restriction to one of the following inventions is required under 35 U.S.C. 121:

I. Claims 331-349 and 360-359, drawn to a method and apparatus for the detection of an analyte's interaction with a metal particle as resolved by surface Plasmon intensities, classified in class 436, subclass 164.

II. Claims 350-359, drawn to composition of matter having metal islands, classified in class 438.

The inventions are distinct, each from the other because of the following reasons:

Inventions I and II are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct if they do not overlap in scope and are not obvious variants, and if it is shown that at least one subcombination is separately usable. In the instant case, subcombination II has separate utility such as a semiconductor chip. See MPEP § 806.05(d).

The examiner has required restriction between subcombinations usable together. Where applicant elects a subcombination and claims thereto are subsequently found allowable, any claim(s) depending from or otherwise requiring all the limitations of the allowable subcombination will be examined for patentability in accordance with 37 CFR 1.104. See MPEP § 821.04(a). Applicant is advised that if any claim presented in a continuation or divisional application is anticipated by, or includes all the limitations of, a claim that is allowable in the present application, such claim may be subject to provisional

statutory and/or nonstatutory double patenting rejections over the claims of the instant application.

Restriction for examination purposes as indicated is proper because all these inventions listed in this action are independent or distinct for the reasons given above and there would be a serious search and examination burden if restriction were not required because one or more of the following reasons apply:

(a) the inventions have acquired a separate status in the art in view of their different classification;

(b) the inventions have acquired a separate status in the art due to their recognized divergent subject matter;

(c) the inventions require a different field of search (for example, searching different classes/subclasses or electronic resources, or employing different search queries);

(d) the prior art applicable to one invention would not likely be applicable to another invention;

(e) the inventions are likely to raise different non-prior art issues under 35 U.S.C. 101 and/or 35 U.S.C. 112, first paragraph.

Applicant is advised that the reply to this requirement to be complete must include (i) an election of a invention to be examined even though the requirement may be traversed (37 CFR 1.143) **and (ii) identification of the claims encompassing the elected invention**.

The election of an invention may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply

does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse. Traversal must be presented at the time of election in order to be considered timely. Failure to timely traverse the requirement will result in the loss of right to petition under 37 CFR 1.144. If claims are added after the election, applicant must indicate which of these claims are readable on the elected invention.

If claims are added after the election, applicant must indicate which of these claims are readable upon the elected invention.

Should applicant traverse on the ground that the inventions are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

Newly submitted claims 350-359 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: See the above restriction requirement.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 350-359 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claim Rejections - 35 USC § 102

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 331-349 and 360-367 are rejected under 35 U.S.C. 102(a,b) as being clearly anticipated by Bowen et al. (USP 4,802,761), Krull (USP 5,449,918)[cited by Applicants'] or JP 20003565587 [cited by Applicants'].

Bowen et al. teach a method and apparatus for analyzing samples by Raman spectroscopy (SERS or SERRS). A substrate contains metal sol particles and is placed in contact with the sample where analytes attaches to the particles. Column 5 teaches Laser and monchromator are tuned in the range of 220-900 nm to create a Plasmon resonance phenomenon that is quantified by a detector. Column 6 line 19 teaches the metals selected for the island include silver and copper which are identical to the claimed metals. Column 6 lines 55-65 teach algorithms are used to compare the spectra to quantitatively/qualitatively identify the analytes. Column 9 lines 33-41 teach use of Raman standards to ensure calibration which has been read on the claimed first structure and first measurement (e.g. this measurement is a blank where the reading is made in the absence of the analyte). Column 9-10 lines 60-38 respectively teach the analyte is absorbed or associated with the metal sol particles which have been read on the second measurement.

Krull et al. teach an optical chemical sensor for direct and continuous measurement of organic species. The sensor is based upon the use of surface Plasmon resonance to amplify fluorescent emissions from membranes with thin metal film islands. Column 2 lines 33-38 teach the metal particles include the

claimed gold and silver particles. Column 4 lines 40-49 teach the silver islands have a thickness of 40 angstroms which has been read on the claimed "... metallic films of a thickness not exceeding 10nm." Column 5 line 62 through column 7 line 37 teach depositing the silver islands on glass which has been read on the claimed " ... substantially transparent substrate …". This portion also teaches comparisons of the sensor in contact with various analytes and the differences in fluorescence that is used to identify the analyte which has been read on the claimed " ... generate a first measurement ... generate a second measurement ... sensing a presence or absence of binding ... by utilizing ... a change of intensity between the second surface plasmon intensity and the first surface plasmon intensity."

JP 20003565587 teach a sensor unit(10) comprising fine gold particles(10b) fixed on a glass substrate(10a). Additionally, the European search report provide by Applicants on 6/10/09 further characterizes figures 1,2 and 4-10 and paragraph[52] as teaching the claimed invention.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 368-376 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bowen et al., Krull (USP 5,449,918)[cited by Applicants'] or JP 20003565587 [cited by Applicants'].

See Bowen et al., Krull (USP 5,449,918)[cited by Applicants'] and JP 20003565587 [cited by Applicants'] supra.

These references are silent to assemblying all of the required components into a kit.

It is well settled that combination of prior art elements according to known methods to yield predictable results. The cited prior art teaches all of the claimed elements and the combination of all of these elements into a kit to perform the well known, expected and predictable results would have been within the skill of the art. Additionally, it would have been within the skill of the art to assembly all of the components required to perform a known assay in a kit as a matter of commercial expedience.

It would have been within the skill of the art to modify Bowen et al., Krull (USP 5,449,918)[cited by Applicants'] or JP 20003565587 [cited by Applicants'] and supply all of the required components in a kit to achieve the well known and expected results or to gain the advantage of commercial expedience.

Response to Arguments

Applicant should submit an argument under the heading "Remarks" pointing out disagreements with the examiner's contentions. Applicant must also discuss the references applied against the claims, explaining how the claims avoid the references or distinguish from them.

Applicants' remarks that the 6/29/09 amendments place the claims in condition for allowance were not convincing because no explanation why the claims define over the prior art was provided.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lyle A. Alexander whose telephone number is 571-272-1254. The examiner can normally be reached on Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden can be reached on 571-272-1267. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Lyle A Alexander
Primary Examiner

Art Unit 1797

/Lyle A Alexander/
Primary Examiner, Art Unit 1797